

# HARRINGTON (F.B.)

## APPARATUS

FOR THE

# Intra-Venous Injection of Salt Solution

— II —

## CASES OF HEMORRHAGE.

DESIGNED BY F. B. HARRINGTON, M.D., BOSTON, MASS.

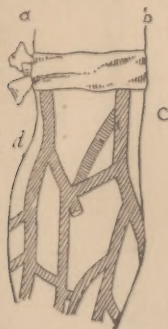
[For further information see *Boston Medical and Surgical Journal*, March 4 and May 27, 1886.]

Within late years it has been found by experiments on animals that those dying from loss of blood could be resuscitated by the injection of solutions of common salt. Salt solution is an indifferent fluid, and the beneficial effect is due to the increase of volume given to the blood, so that the red corpuscles remaining after a severe bleeding are brought into circulation by a harmless medium, and the danger of death diminished. Moreover, the increased volume of the blood gives the heart something to contract upon, and its action becomes stronger and slower. The following solution is recommended:—

Sod. Chlorid. . . . .	3 1½.
Sod. Bicarb. . . . .	grs. xv.
Aquæ Distillat. . . . .	O ii.

This should be raised to from 100° to 104° Fah.

From a pint to three pints can be used. The utmost care should be used that no air shall enter the circulation. The median cephalic vein can be most conveniently used. The vein should be dissected out and the needle tied into it.



CUT I.—Superficial Veins at Bend of Elbow: *a*, outside; *b*, inside; *c*, basilic vein; *d*, cephalic vein.

Price, \$3.00.



CUT II.—Method of inserting Needle.

The amount of pressure can be regulated by raising or depressing the reservoir. The solution enters the current quickly at an elevation of three feet. For convenience, powders of the Chloride and Bicarb. of Soda may be carried with the Apparatus. The operator or an assistant should hold the reservoir and see that it does not become emptied and air drawn into the vein.

The apparatus is small and can be carried in the coat-pocket.

MANUFACTURED BY

CODMAN & SHURTLEFF,

BOSTON, MASS.

